

# Outbreak Tips and Tricks

Stefanie Ralph, Network Coordinator

Virginia Tirilis, Network Consultant

Central South Infection Control Network



# Wasn't this CDI Outbreaks Tips and Tricks?

- These tips and tricks are applicable to all outbreaks
- These tips encourage you to:
  - Build your foundation on good IPAC practices
  - Tweak what you need to during an outbreak
  - Evaluate post outbreak
  - Create new normal practices
- Consistency instills confidence in you and your program
- There are always things you change or alter depending on the outbreak organism
  - A slide with a few CDI specifics will be included at the end.

# Key Resources

- PIDAC Best Practice Guidelines
  - RPAP and Annexes A,B,C
  - Environmental
  - Hand Hygiene
- Environmental Cleaning Toolkit
- CHICA Audits
  - PPE
  - Cleaning
- JCYH
- Unit Audits
- Gap Analysis

# Before the Outbreak

# Surveillance

- Daily
- Weekly
- Monthly
- Quarterly
- Annually



Identify symptomatic patients/residents routinely

- Unit Rounds
- Charting:
  - Lab results and point prevalence screening
  - Unexplained symptoms of new onset (GI, Resp, Rashes)
  - Frequency/Unexplained symptoms
  - Meds
  - Bristol stool chart # (for GI)
- Nursing station:
  - Huddle/Scrum
  - Shift report
- Electronic notification:
  - Fax, Email, Phone, Page
  - Electronic charting system alert/flag

# Weekly Surveillance

- Per unit: cluster vs. outbreak
- Per site: common denominator/link?
  - Placement/movement/multiple transfers – bed to stretcher vs. total bed move
  - Diagnostic tests – portering use of stretchers, wheelchairs
- What's in the community?
  - Be aware of outbreaks occurring at other institutions
- Don't just focus on one bug, all may be linked to each other.
  - Rising VRE rates may indicate environmental cleaning issues
  - Rising MRSA rates may indicate poor HCW hand hygiene

- Who do you share your rates with?
  - Depends on what you are measuring and who should know the information (e.g. AROs, CDI)
  - IC Committee, senior team, all ICPs, frontline staff
- Do you share only rates, or do you also share number of cases?
  - Rate may be 0.34 per 1000 patient days, but that could be 5 cases on one unit
- Have you established a baseline? Who do you compare yourself with?
  - Local benchmarks
  - Provincial benchmarks
  - National benchmarks, CNISP

# Quarterly/Annually

- Who do you share your rates with?
  - Acute Care:
    - Board
    - IC Committee
    - Quality and Clinical Practice
    - Risk Management
  - LTC:
    - Board
    - IC Committee
    - Resident/Family Council
- Seasonal variations?
  - Are there reasons for seasonal variation if they exist? (e.g. increased antibiotic usage in the winter months?)
- Do you create visuals?
  - Tables and graphs with benchmarks can help you identify trends and make communication easier

- How is the equipment and environment to be cleaned
- How often is the equipment and environment to be cleaned
- Who is responsible for cleaning what?
- What product is used for cleaning?
- Are their processes in place for quality control of cleaning?
  - Audits of cleaning processes
  - Cleaning solution dispensing and dilution monitoring
  - Reviews of staff understanding and execution of cleaning processes (e.g. clean to dirty, top to bottom)
  - Continuous education plan for cleaning staff
  - Process for communicating change in practice
- Work with IPAC to identify expected burden of disease. When this burden is exceeded is a plan in place for additional cleaning and resources?

- Do you have dedicated outbreak supplies?
  - Lab test supplies:
    - Swabs, stool sample collection containers
    - Process identified that includes timely results
    - If you can't get timely results look for alternate solutions
  - Cleaning supplies:
    - Regular cleaning vs. isolation cleaning supplies
    - Are you prepared to enhance? (e.g. product available, supplies available)
  - Equipment:
    - Stock of PPE supplies
    - Do you have a plan for dedicating equipment to isolated persons? (e.g. borrow from other units, lending/rental agreement from vendor)
    - If equipment shortages are an identified issue is there an acquisition/replacement plan.

- Daily communication plan
  - Time clock – similar to what was developed in pandemic planning
  - This should be developed beforehand, and used in all infectious disease outbreaks. Develops a familiar routine that helps manage confusion
  - What time do you:
    - Do case finding
    - Rounds
    - Outbreak meeting
    - Update staff
    - Update external partners (public health, RICNs, etc.)
    - Update media.

- **Between healthcare facilities and practitioners**
  - Sharing information on transfer
  - Asking questions before accepting/placing a repatriation
    - CDI relapse can occur within 8 weeks. Consider asking/sharing if the person tested positive for CDI in the last 8 weeks
  - Asking questions of physicians with direct admissions
  - Who does admissions at your site? Do you meet with them?
- **Line lists**
  - Do you use line lists all the time?
    - Is there a separate line list for staff and patients/residents?
    - Do staff know when/how to alert you?
  - Are staff filling them out correctly?
  - Are facility and public health line lists accurate and comparable?
  - Do you know when to send the updated line list to public health?

- Create messaging for the following groups:
  - Staff
    - Consider department specific direction (e.g. maintenance, dietary)
  - Ill staff
  - Families/Visitors
  - Volunteers
    - Clergy
  - Students
    - Residents, nursing, affiliated health students, high school co-op, pre-school, special student days (Grade 9 take your kids to work)
  - External support services
    - Animal therapy, dentist, alternative medical practitioners
  - Hospitality service – TV people
  - General public
    - Does switchboard have a script so they can handle basic calls from the general public
    - Volunteer greeters at welcome desks should also have scripts and be able to handle basic questions.

## Senior Team

- The senior team must take a prominent role in outbreak communications to staff. This is especially important during large outbreaks. The following are suggestions for how senior team can be involved:
  - Daily walkabouts
  - Huddles with affected units
  - Town halls or other open forums where staff can ask questions
  - Screen saver messaging
  - Posted memos
  - Paystub communication
  - Intranet or other internal system communication

# Outbreak Meeting

- **Who attends the meeting?**
  - Ideally, there should be representation from every department at the management level. Ad hoc membership can include frontline staff
  - This needs to be customized according to your particular facility and partnerships
  - Public health representation for publically reportable infectious disease outbreaks. However, if not publically reportable PH rep may bring a valuable and different perspective to the team
  - RICN staff may also be asked to attend depending on the facility's needs and wishes
- **Plan ahead:**
  - Engage senior team regarding who should attend
  - Determine a time and location that is best for your organization
  - Do you need more than one daily outbreak meeting? (bed management issues, multi-site corporations, new developments, discuss new lab results).

- Have a collection of draft media releases ready to go
  - Can easily adapt and add current outbreak info
- Need one designated spokesperson
  - Good credibility
  - Good speaker who is able to deliver a clear message
  - Must be transparent
- Communicate with the media on your terms
  - Set a time each day for updates
- Empathy
  - When a death occurs don't make excuses (e.g. advanced age, comorbidities)
  - Acknowledge the loss, and share sympathies for family and friends
  - Reassure public that appropriate measures are in place to protect their loved ones
- Remember many people have cell phones that take pictures and video. Staff need to be aware they may be watched and recorded at any time.

# During the Outbreak

# Get a Handle on What's Happening

- Keep a detailed timeline of new cases, control measures, and changes in control measures
- Consider creating a visual timeline or Gantt chart
- Create your epi-curve
- By having these visuals handy it may enhance your initial outbreak meetings and discussions with staff
- Find a way to keep yourself organized. Keep all of your notes in one place
  - Make sure you can follow-up appropriately to requests in a timely fashion.

- You need a well organized outbreak file, with the following sections:
  - Current line listing, epi-curve, and outbreak map
  - Old line listings
  - Lab reports
  - Communication section
    - Communications to staff
    - Media releases
    - Newspaper articles
  - Outbreak meeting minutes
  - Public health communications – fax confirmations
  - Costs (if you aren't going to track this you need to ask other managers to)
- Keep a file of things you may need for future outbreaks:
  - Vendors
  - Fact sheets
  - Names of key contact people

# Ask for Help

- You need to be, and appear organized, confident, and able to lead
- Remain calm and handle one issue at a time. This is important during outbreak meetings
- In this circumstance an autocratic leadership style is a good thing
- Invite a “fresh” set of eyes and ears to watch and audit the processes happening in the outbreak area
- You need to:
  - Delegate – are there things people can do for you?
  - Recruit:
    - Help for you (e.g. Modified staff, volunteer, ICP, PH, RICN)
    - Advocate for additional staffing in other departments as appropriate (e.g. housekeeping, nursing)
  - Give yourself quiet space to think, plan, assess, and evaluate
  - Identify when you are overwhelmed and need a break.

# Ask the Staff

- Set aside time to hear from the staff
  - Don't combine this with an in-service
  - This time should be all about them
- Ask open ended questions:
  - What caused this outbreak?
  - Why is this outbreak continuing?
  - What are we missing?
  - What can I do to help?
- The staff may not be confident in your decisions. You may need to build confidence in the staff before they will really commit to additional control measures:
  - Talk candidly with staff
  - Explain your rationale for decisions, even if you think they won't understand it.

# Flow Patterns

- You need to go to the affected units and watch the flow of patients/resident, staff, visitors, and equipment
- You need to dedicate a large block of time for this to be able to identify areas of concern
- This will allow you the opportunity to become aware of all activities occurring on the unit. In particular look for:
  - Patient care assignments (staff cohorting?)
  - Meal delivery and pick-up
  - Stores deliveries
  - Medical Device Reprocessing department deliveries
  - Maintenance staff traffic
  - Transfers, both on and off unit
  - Tests
  - Affiliated health professionals
  - Visitor and family involvement and behaviours.

- Shut downs. These are difficult administrative decisions, however sometimes the following may need to be considered for the greater good:
  - Surgery cancellations
  - Unit closures
  - Program closures or restrictions (out patient treatments)
- Controlled access for visitors, and general traffic:
  - Do visiting hours need to be changed?
  - Are you able to lock doors to outbreak units to assist with traffic control?
  - If you can't lock the doors do you assign someone (e.g. security, volunteer).

- If an outbreak continues after initial outbreak control measures have been put in place, a “project clean” will likely be needed
- A project clean is a systematic process of ensuring everything on the affected unit(s) is cleaned
  - This includes all patient rooms, beds, patient care equipment, personal patient equipment (e.g. walkers, wheelchairs), staff areas, washrooms, cubby holes, railings and surfaces
  - Mattresses should be checked for cracks during the cleaning process
  - Blueware should be discarded (if disposable), or sent for reprocessing
  - This is also a good time to de-clutter the unit. Get rid of unnecessary items. This should also include patient/resident rooms to allow for adequate cleaning. Extra items can be sent home with family with instructions for their return in future
  - Linen and waste handling processes do not need to differ from normal routine practice
  - Establish a process for meal tray delivery and pick-up to minimize any cross contamination.

- In order for a project clean to be effective the following needs to be considered:
  - The idea is to ensure all potential reservoirs are removed, if this takes place over a long period of time you don't get a baseline clean
  - Ideally, the project clean should be completed within 2-4 days on a 30 bed unit\*
  - Sufficient staffing resources need to be dedicated in order to meet the timeline. This includes housekeeping, and patient care support staff (all beds need to be cleaned, so patients will have to be transferred)
  - One person needs to be responsible for organizing the clean and being on the unit while it occurs. Ideally, a housekeeping supervisor would lead the charge and work along with the charge nurse.

# Project Clean

- Staff will need clear instructions in order for this process to be effective. This may include ensuring cleaning techniques are effective
- The project clean should be approached in a systematic fashion (e.g. start at one end of the hall and work to the other)
- There needs to be a way of indicating what has been cleaned so nothing is missed. Consider using coloured dots for equipment, labeling clean unoccupied rooms and keeping records
- Make sure equipment is cleanable (e.g. should not be taped together)
- Person responsible for project clean should attend daily outbreak meetings and provide an update on progress and additional resources required.

- **Signage:**
  - Outbreak signage and isolation signage
  - Clear and visually appealing
  - Are signs in the right places? (all entrances, elevators, stairwells, rooms)
- **Fact Sheets for:**
  - Staff
  - Patient/Resident and families
    - Infectious organism
    - Basic hygiene practices – clean hands, respiratory etiquette, don't visit when ill
- **Tip Sheets:**
  - Quick reminders with visuals re. additional precautions, control measures, IPAC basics (like donning/doffing, hand hygiene, hand care)
- **In-services (formal and/or informal)**
  - How are you communicating and educating the alternate shifts?

# Creative Solutions

- As the outbreak continues you may need to think out of the box to find creative solutions to problems
- If you have a large facility wide outbreak, focus on creative solutions for limiting the outbreak to one area. For example,
  - Are there decommissioned units that could be re-opened to help manage burden?
  - Are there services that have been limited and areas re-purposed?
- Are staff tired of the outbreak and motivation is waning?
  - You may need to re-motivate staff. Consider a mid-outbreak reward or boost (e.g. pep rally, pizza party for affected units, thank you note).

# After the Outbreak

# Outbreak Paperwork

- Complete your outbreak file:
  - Do you have all the lab results?
  - Did you do a final line listing and final epi-curve?
  - Occupational Health claims and/or reports completed
- Complete a summary report that includes:
  - Case counts
  - Symptoms
  - Persons affected (% staff vs. % patient/resident)
  - # of deaths (and details on cause of death, chart reviews)
  - Source of outbreak
  - Mode of transmission
  - What worked well
  - Areas for improvement
- Share the draft summary report with the management team and ask for feedback
- Share a version of the summary with staff and ask for their feedback on the outbreak.

- **Celebrate your staff**

- Consider sending out an end of outbreak media release that acknowledges the hard work of the staff
- “Thank you” communications to staff are important from the ICP, unit managers, and senior team
- Depending on outbreak events you may want to consider an “end of outbreak” reward, such as a pizza party or cake
- If appropriate, recognize key staff, departments, or units who were leaders, or positive deviants, during the outbreak

- **Celebrate yourself**

- We learn from each other. Consider sharing your outbreak experiences with other ICPs:
  - Abstract to CHICA
  - Presentation at CHICA chapter meetings
  - Presentations at other events
  - Share your experiences at meetings
  - Email your closest colleagues

- **Remember to thank your supporters**

- Thank management and senior team for their support
- Thank external partners (e.g. public health, RICNs, other ICPs).

# Post-Outbreak Meetings

- If it was a large outbreak post-outbreak meetings may help you:
  - Identify contributing and propagating factors
  - Identify areas for improvement
  - Identify the need for major restructuring of current resources (e.g. staffing, facility, number of patients per room, utility rooms, etc.)
- Use these discussions to:
  - Revise policies and procedures
  - Develop a continuous improvement plan
  - If there was an ICRT visit, develop a plan to address ICRT recommendations
  - Create strategic planning goals and objectives for addressing deficiencies
- Consider sharing your final post-outbreak plans with all staff.

# CDI Specific Tips and Tricks

# A Few CDI Specifics

- If dealing with a CDI outbreak, you need to consider the following:
  - Antibiotic usage and control
  - Lab testing methodology and turn around time
  - Method of patient transfer (stretcher as opposed to bed)
  - Communication re. external transfers and intra-site transfers
  - Type of cleaning agent and appropriate use of agent (E.g. dilution, **contact time**).

# A Few CDI Specifics

- Ability to clean surfaces and items
  - If you can't clean it, should you temporarily or permanently remove it?
- Clean and dirty equipment tagging system
- Human waste management
  - No spray wands
  - How are commodes/bed pans managed?
- Availability of new treatments
  - Human probiotic infusion
- Reaction of public, media, patients and families
- The potential for severe illness, adverse events, and mortality.

# A Few CDI Specifics

- Terminal clean before precautions are lifted
- Process for cleaning/carbolizing mattresses of long stay persons (e.g. every 30 days)
- Consider closing down patient/family access fridges, ice and water machines, and kitchens for duration of outbreak. If families bring in food items they should be single servings with leftovers discarded
- You may need to assign additional tray pick-up times and additional water/snack distribution.

# A Few CDI Specifics

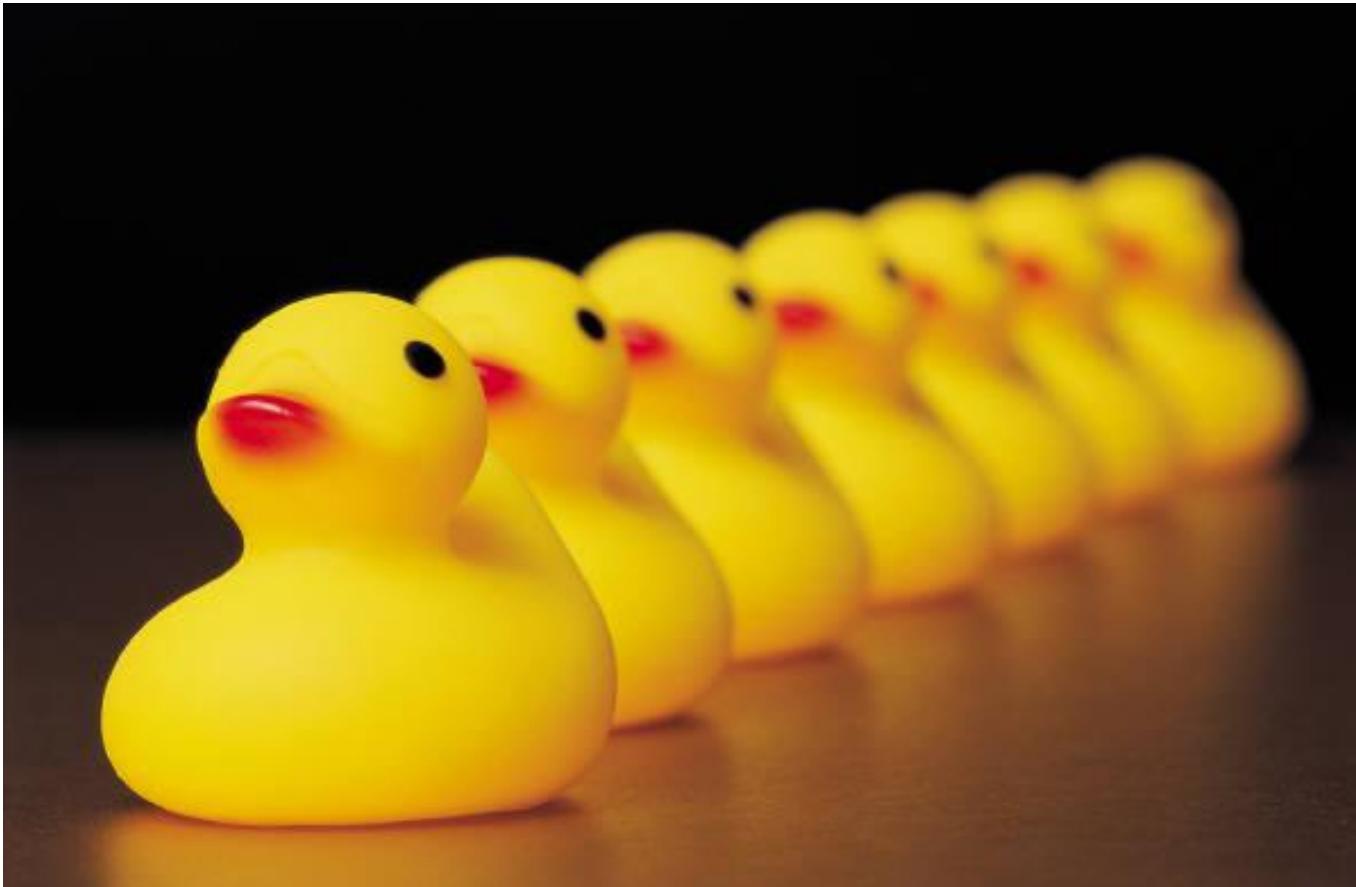
- Remember to consider the emotional needs of isolated patients/residents
  - Long term isolation is difficult and can have a negative impact on patient/resident well-being
  - Isolated persons can leave their room/bed spaces if certain measures are in place:
    - Clean hands
    - Clean clothes and equipment
    - Contained drainage
    - Continent or incontinence Contained to a product
    - Compliant and Comprehend instructions
      - Or, staff techniques in place to mitigate risk.

# Summary

# Key Take Aways

- **Surveillance**
  - Define your surveillance processes
  - Be proactive, look for the outbreak
- **Be prepared**
  - Do what you can before there is an outbreak
  - Prepare tools, and have conversations
- **During the outbreak be a calm, organized leader**
  - Remember to ask for help and delegate
- **Summarize the outbreak and share lessons learned**
  - Post-outbreak meetings may be required to help you identify your lessons learned. This is not always a quick process.

# Never Assume!



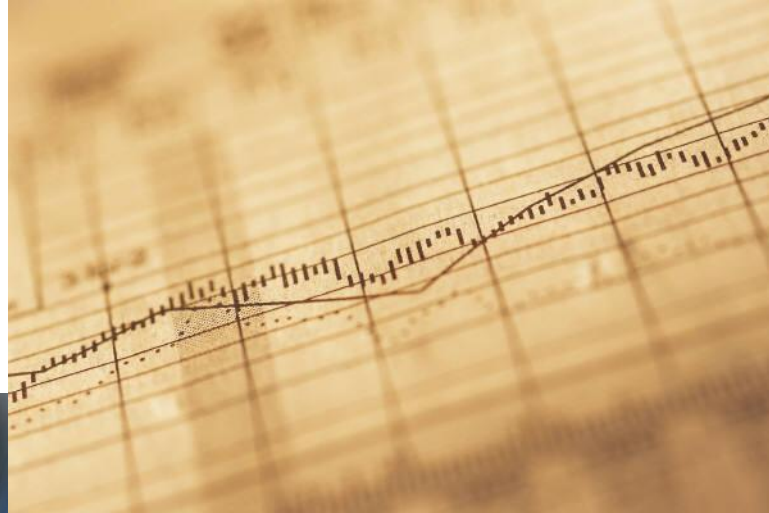
# Ask



# Check



# Communicate



Thank You!

Questions

